

April 29, 2005

MEMORANDUM TO: James W. Clifford, Acting Chief
Special Projects Branch
Division of Fuel Cycle Safety
and Safeguards

THRU: Brian W. Smith, Chief /RA/
Gas Centrifuge Facility Licensing Section
Special Projects Branch, FCSS

FROM: Timothy C. Johnson /RA/
Senior Mechanical Systems Engineer
Gas Centrifuge Facility Licensing Section
Special Projects Branch, FCSS

SUBJECT: APRIL 19, 2005, IN-OFFICE REVIEW SUMMARY: LOUISIANA
ENERGY SERVICES DECOMMISSIONING FUNDING

On April 19, 2005, U.S. Nuclear Regulatory Commission (NRC) staff conducted an in-office review at the Louisiana Energy Services' (LES') offices in Washington, DC, of decommissioning funding documents applicable to the LES gas centrifuge uranium enrichment plant. I am attaching the in-office review summary for your use. This summary contains no proprietary or classified information.

Docket: 70-3103

Attachment: Louisiana Energy Services In-Office
Review Summary

cc:	William Szymanski/DOE	Claydean Claiborne/Jal	Rod Krich/LES
	Monty Newman/Hobbs	James Curtiss/W&S	Troy Harris/Lovington
	Peter Miner/USEC	Betty Richman/Tatum	James Ferland/LES
	Glen Hackler/Andrews	Parker/New Mexico	James Brown/Eunice
	Lue Ethridge/Lea County	Richard Ratliff/Texas	Lee Cheney/CNIC
	Michael Marriotte/NIRS	Jerry Clift/Hartsville	CO'Claire/Ohio
	Derrith Watchman-Moore/NM	Joseph Malherek/PC	Ron Curry/NMED
	Tannis Fox/NMED	Patricia Madrid/NMAG	Glen Smith/NMAG
	Lindsay Lovejoy/NIRS		

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Summary of
Louisiana Energy Services In-Office Review on Decommissioning Funding

Dates: April 19, 2005

Place: Louisiana Energy Services (LES) offices
Washington, DC

Attendees: C. Dean/ICF J. Mayer/ICF
T.C. Johnson/NRC R. Krich/LES
L. Compton/LES

Purpose:

The purpose of this in-office review was to discuss LES' approach for documenting the costs of deconversion of depleted uranium hexafluoride in the decommissioning funding plan.

Discussion:

After introductions, U.S. Nuclear Regulatory Commission (NRC) staff explained that the April 8, 2005, letter from LES provided an insufficient basis for accepting the deconversion cost estimate. The cost estimate in the April 8, 2005, letter was based on proprietary information on a private deconversion plant using the Cogema dry conversion process producing U_3O_8 and aqueous hydrogen fluoride (HF). The proposed Cogema process was the same as the plant Cogema has been operating in Pierrelatte, France, for 20 years. The total conversion cost was estimated by LES to be \$2.67 per kilogram uranium (U).

LES staff stated that the cost estimates used a proprietary Urenco business study of a proposed 3500 Metric Tons (MT) U/year deconversion plant for the Capenhurst site. The study was based on a Cogema response to a Urenco request for proposal. LES modified the Cogema information to reflect a 7000 MT U/year capacity by doubling the operating costs and by adding funds to reflect the increased capital and construction costs of a larger capacity plant considering the shared nature of some systems. Additional funds were also added for Americanizing the design and for licensing.

The Cogema proposal assumed that HF would be sold commercially and did not include the costs to neutralize aqueous HF to calcium fluoride. LES staff indicated that they believe that neutralization would have no effect on the overall deconversion costs because those costs would be balanced by the elimination of costs for equipment for storing HF prior to commercial sale.

LES staff stated that differences between the Cogema-based estimate and the deconversion costs in the U.S. Department of Energy (DOE) letter dated March 1, 2005, reflect the need for DOE to address issues involving non-standard and damaged uranium hexafluoride cylinders and fission product contamination in some of the material to be processed.

NRC staff also asked for clarification on the overall U_3O_8 disposal cost estimate. The LES estimate is based on proprietary information provided by Waste Control Specialists (WCS). The WCS estimate presented a range of disposal costs. LES indicated that it used the lower end estimate as its disposal cost basis in the decommissioning funding plan because it was similar to the cost estimate (\$75/cubic foot) provided by Envirocare for disposal of large quantities of

facility decommissioning wastes. LES staff expected that Envirocare would have similar costs for disposal of depleted uranium oxides generated from deconversion.

NRC staff indicated that the additional basis provided by LES would be sufficient in completing the decommissioning funding plan review.